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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,980	10/16/2003	Dirk Lauhoff	TRW(AEC)6781	8114
26294 7590 08/26/2009 TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700 CLEVEVLAND, OH 44114				
EXAMINER				
WILSON, GREGORY A				
ART UNIT		PAPER NUMBER		
3749				
MAIL DATE		DELIVERY MODE		
08/26/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/686,980

**Applicant(s)**

LAUHOFF, DIRK

**Examiner**

Gregory A. Wilson

**Art Unit**

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are REJECTED.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Prosecution on the merits of this application is reopened on claims 6-8 considered unpatentable for the reasons indicated below:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 6 and 7** are rejected under 35 U.S.C. 102(b) as being anticipated by **Nagata et al (4,123,756)**. **Nagata et al** discloses a miniature radio antenna formed integral with a molded plastic housing and includes a frame (1, 2) molded of plastic and capable of being mounted into a vehicle body, an antenna (5, 6, 8, and 9) and antenna conductors (ie: antenna microstrip or connect plug) (13 and 14) are embedded in and completely surrounded by the walls of the plastic casing and cover (SEE column 2, lines 52-64).

**Claims 6-8** are rejected under 35 U.S.C. 102(b) as being anticipated by **Custer et al (2,995,089)**. **Custer et al** discloses an antenna and nose cap construction capable of being mounted onto a vehicle body wherein the nose cap portion is of a suitable molded plastic integrally molded with fins (plurality of ribs 2) which support ring (3) and antenna (4) embedded in the ring (SEE Figure 2) which shows a T-shaped

antenna (4, 6) (element 6 is the antenna microstrip) with a first branch spanning the opposed frame sections and a second branch extending along one of the opposed frame sections (SEE Figure 2), additionally the frame (3) is rectangular (in re claim 8).

### ***Claim Rejections - 35 USC § 103***

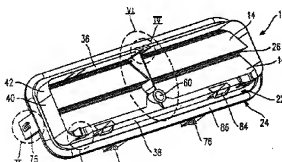
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 6-8** are rejected under 35 U.S.C. 102(e) as anticipated by Stiehl (2003/0022616) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stiehl (2003/0022616) in view of Custer et al (2,995,089).

**Claims 6-8** are rejected under 35 U.S.C. 102 (e) as being unpatentable over **Stiehl (2003/0022616)**. Stiehl teaches an air vent (10) for use in a vehicle, including a frame (12) made of plastic (SEE [0017]), a T-shaped antenna (62) having a middle bar (64) and a crossbar (66), a connector plug (60). When placed in the vehicle interior, the antenna is covered by the plastic, but is not described as being integrated (ie: integral) with the plastic material by injection-molding such that the antenna body is embedded in and completely surrounded by the plastic material of the frame. This limitation

represents a product-by-process claim which is limited by and defined by the process, however, the determination of patentability is based on the product itself which in this case is an antenna with an antenna body and the plastic material. The term "integral" and its derivative is sufficiently broad to embrace constructions united by such means as fastening and welding. In addition the term "embedded" is defined in the dictionary (Webster's II New Riverside University Dictionary) as "to fix securely in a surrounding mass". The antenna (as shown in Figure 1) is fixed securely in the surrounding mass of the plastic frame (12) and thus anticipates the applicants limitation of being integrally molded. In addition, the applicants argument that Stiehl does not teach or suggest an antenna body and plastic material of a frame integrally molded such that the antenna body is embedded in and completely surrounded by the plastic material of the frame is not persuasive. The applicant furthermore goes on to argue that claim 6 requires that all parts of the antenna are surrounded by the frame, however this is not what the claims recite and the examiner adds that Figures 1 and 2 clearly show the structure of plastic material (36, 38, 40 and 42) as completely surrounding the antenna.



However, if it is not deemed so by the

applicant, in the alternative Custer et al (2,995,089) teaches that it is not novel in the art for an antenna (4) with an antenna body to be embedded in and completely surrounded by the plastic material of the frame (3) (SEE Figure 2). It would have been obvious to a

person having ordinary skill in the art at the time of the invention to have integrated the antenna into the plastic material as is common knowledge in the art in view of Custer et al, since such a modification would not affect the performance of the antenna, nor does it solve any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one having ordinary skill in the art. While the examiner acknowledges the applicants argument that the antenna of the present invention is also protected from physical damage when it is not mounted in the vehicle, this argument does not result in a structural difference between the claimed invention and the prior art (noted above) in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory A. Wilson/  
Primary Examiner, Art Unit 3749  
August 25, 2009